

ABSTRACT

Methods and apparatus are disclosed herein for ingress port filtering for packet switching systems. One implementation includes a mechanism to duplicate and provide an incoming packet stream to multiple per-port ingress filters. Under standard operating conditions, these filters are configured to be cooperative and complementary, with the portion of packet traffic filtered out of the stream on one port allowed to pass through on the other ports so as to load balance traffic across redundant systems. Upon recognition of a failure condition, the filters are typically modified to adapt to the error condition, which may include allowing all traffic to pass through one ingress port while filtering all traffic from the other ingress ports, or dynamically re-programming the filters to effectively redistribute the portion of the traffic going to an ingress port associated with the error condition to the other ingress ports.